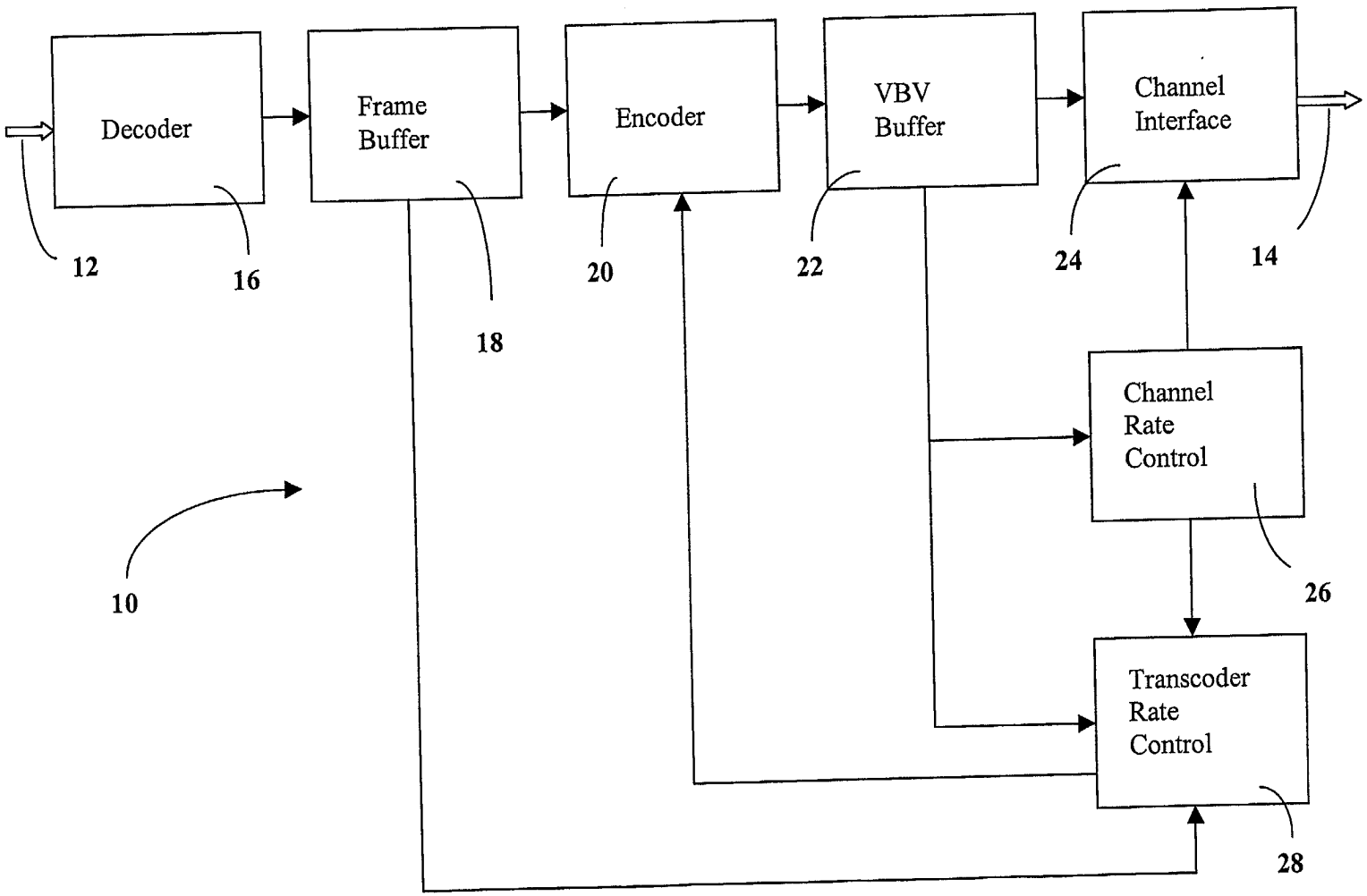

Decoder
Frame Buffer
Encoder
VBV Buffer
Channel Interface
Channel Rate Control
Transcoder Rate Control
12
16
18
20
22
24
14
26
28
10

FIGURE 1

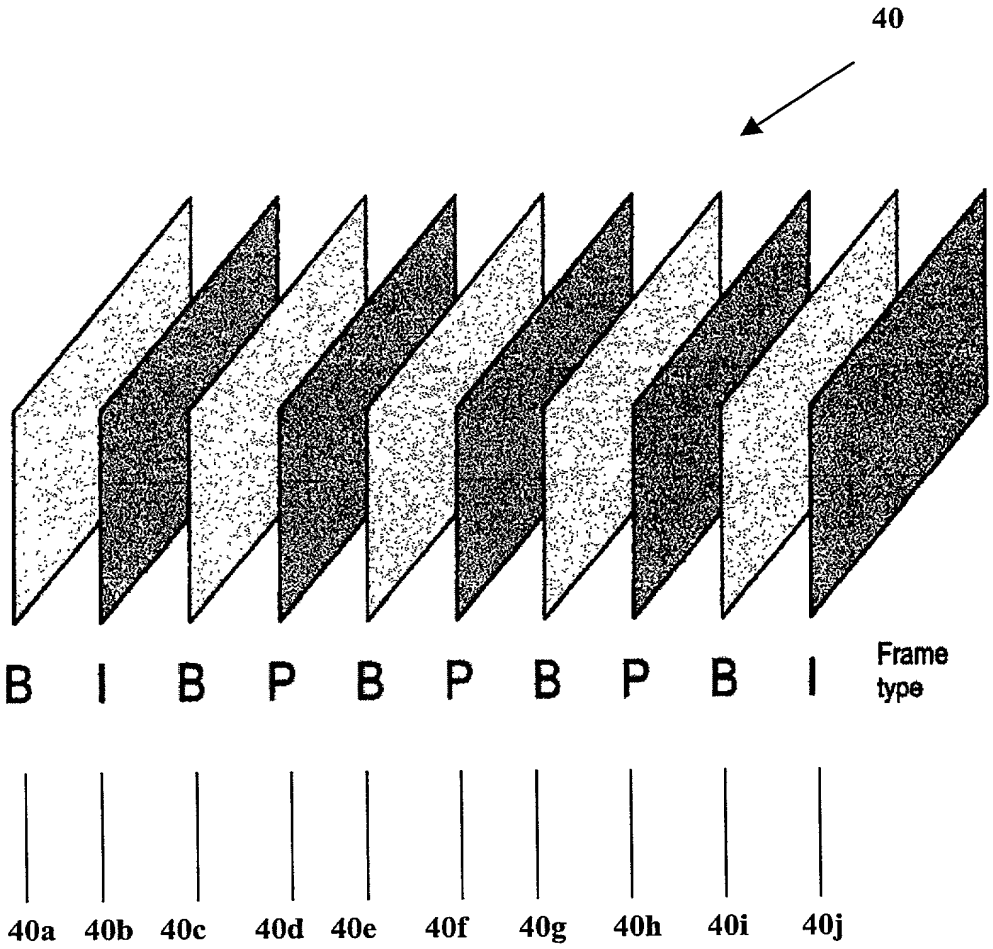

40
B I B P B P B P B I
Frame type
40a 40b 40c 40d 40e 40f 40g 40h 40i 40j

FIGURE 2

Docket 3203

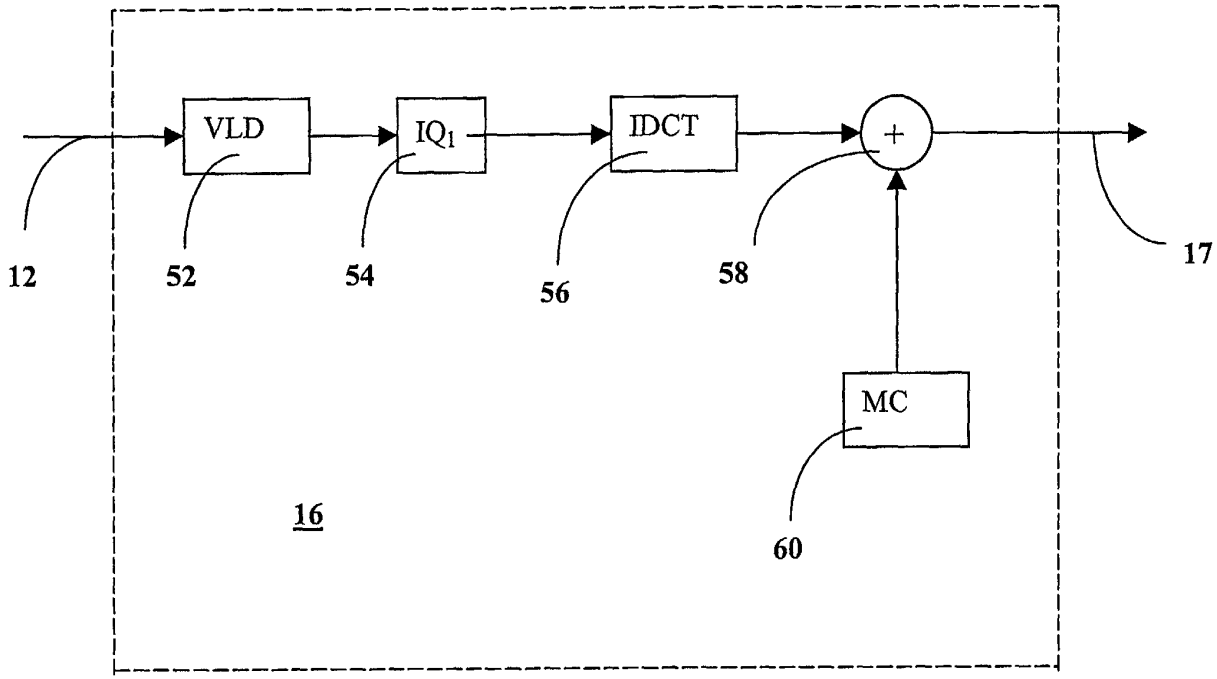


FIGURE 3

Docket 3267

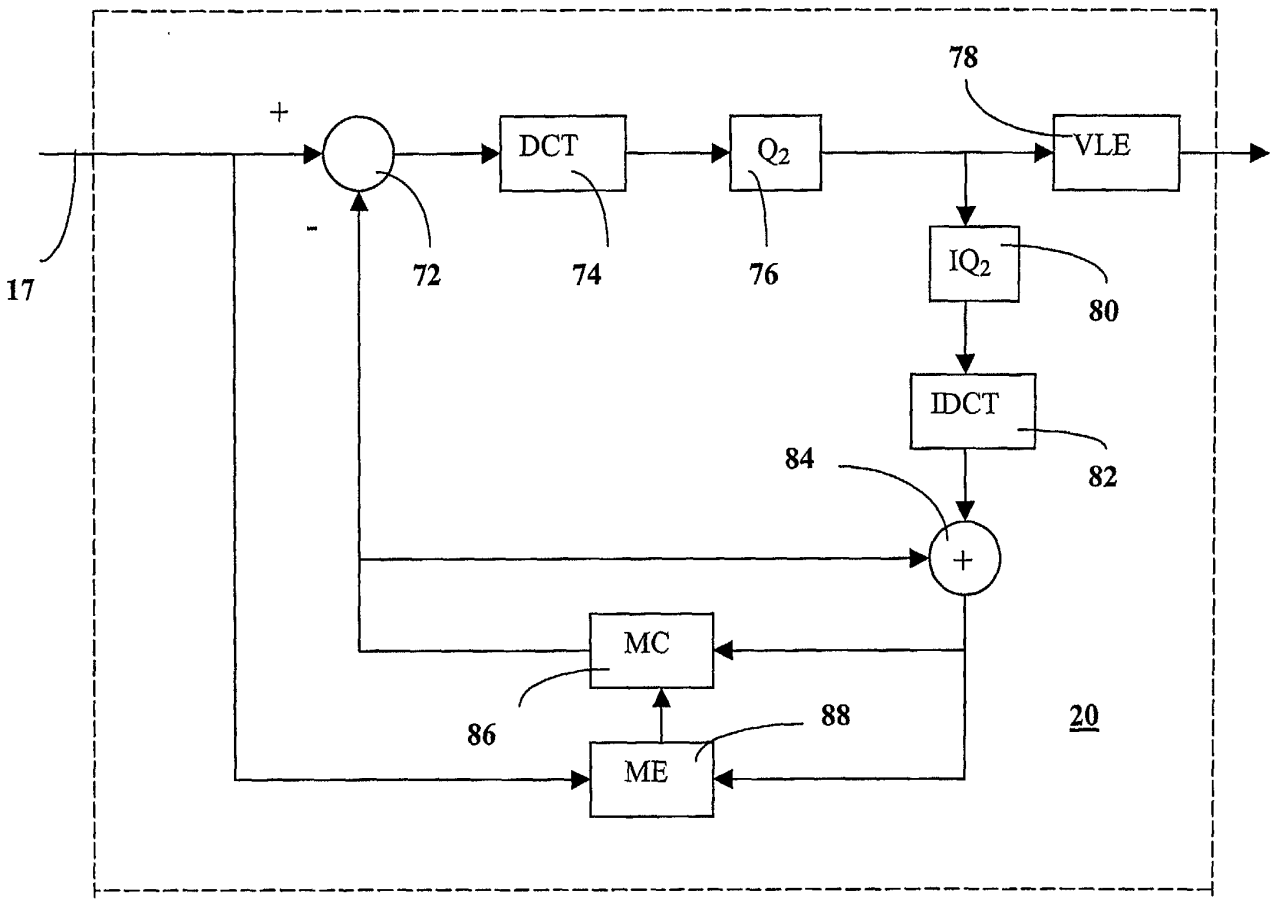


FIGURE 4

FIGURE 5

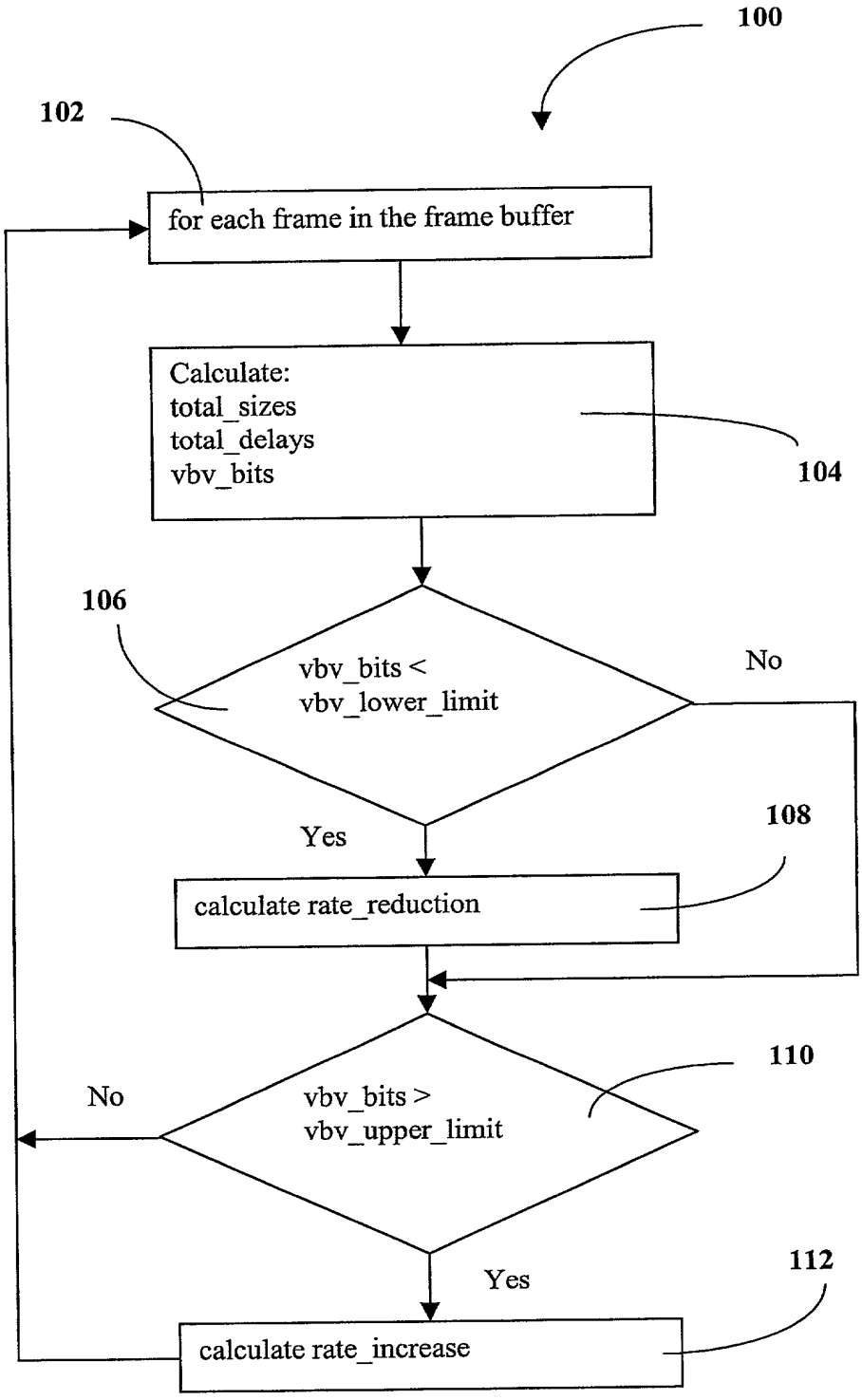

100
102
for each frame in the frame buffer
Calculate:
total_sizes
total_delays
vbv_bits
104
106
vbv_bits <
vbv_lower_limit
No
Yes
108
calculate rate_reduction
110
No
vbv_bits >
vbv_upper_limit
Yes
112
calculate rate_increase

FIGURE 6

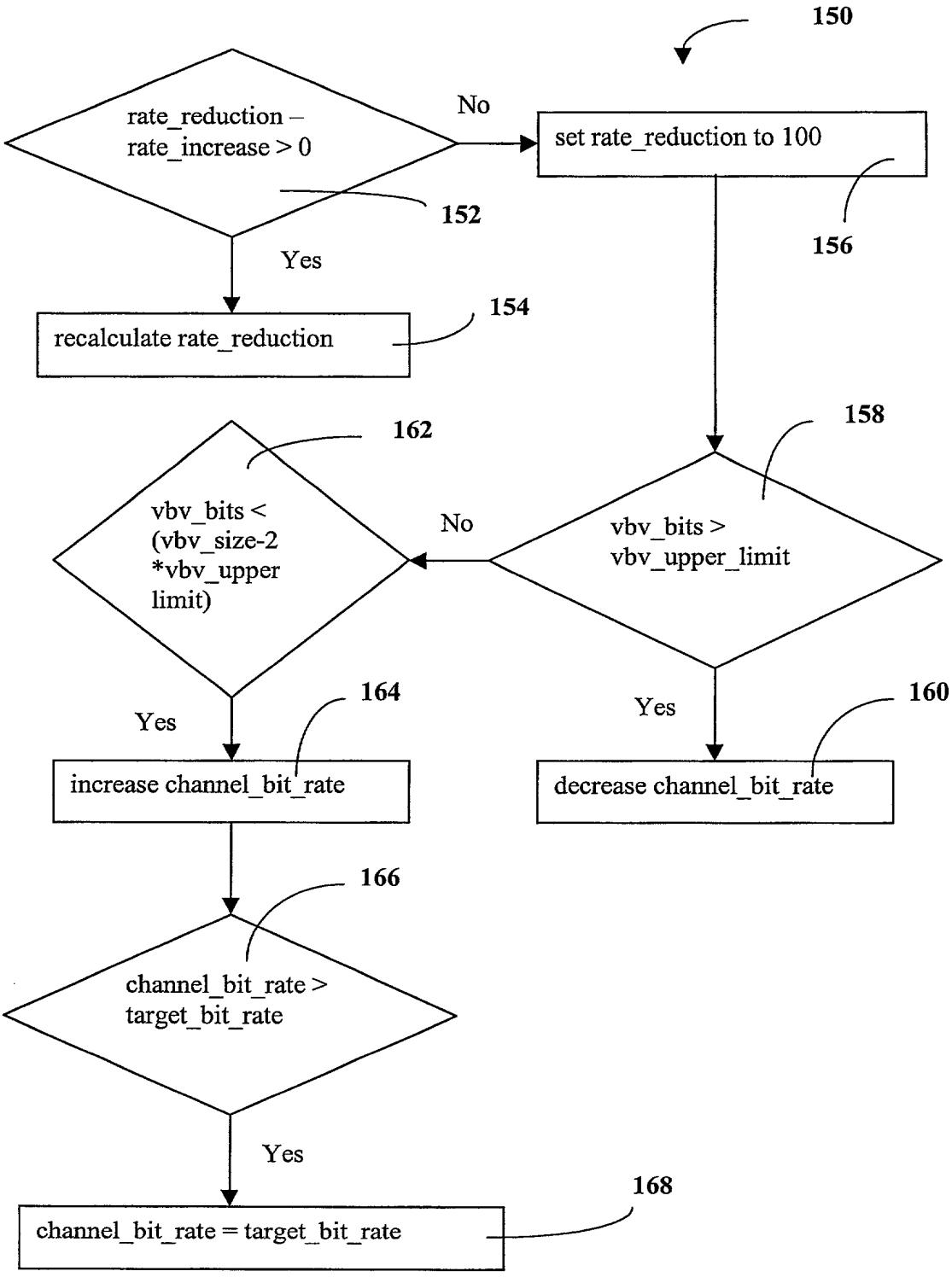

150
rate_reduction – rate_increase > 0
No
set rate_reduction to 100
152
156
Yes
recalculate rate_reduction
154
158
162
vbv_bits < (vbv_size-2 *vbv_upper limit)
No
vbv_bits > vbv_upper_limit
Yes
164
Yes
160
increase channel_bit_rate
decrease channel_bit_rate
166
channel_bit_rate > target_bit_rate
Yes
168
channel_bit_rate = target_bit_rate

FIGURE 7

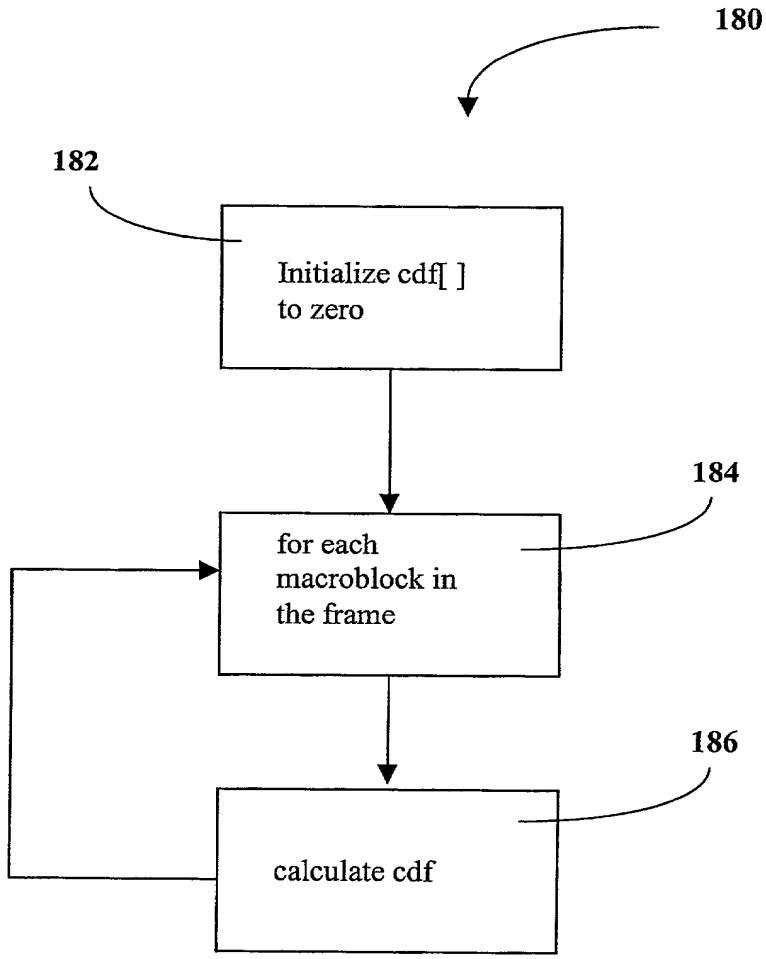
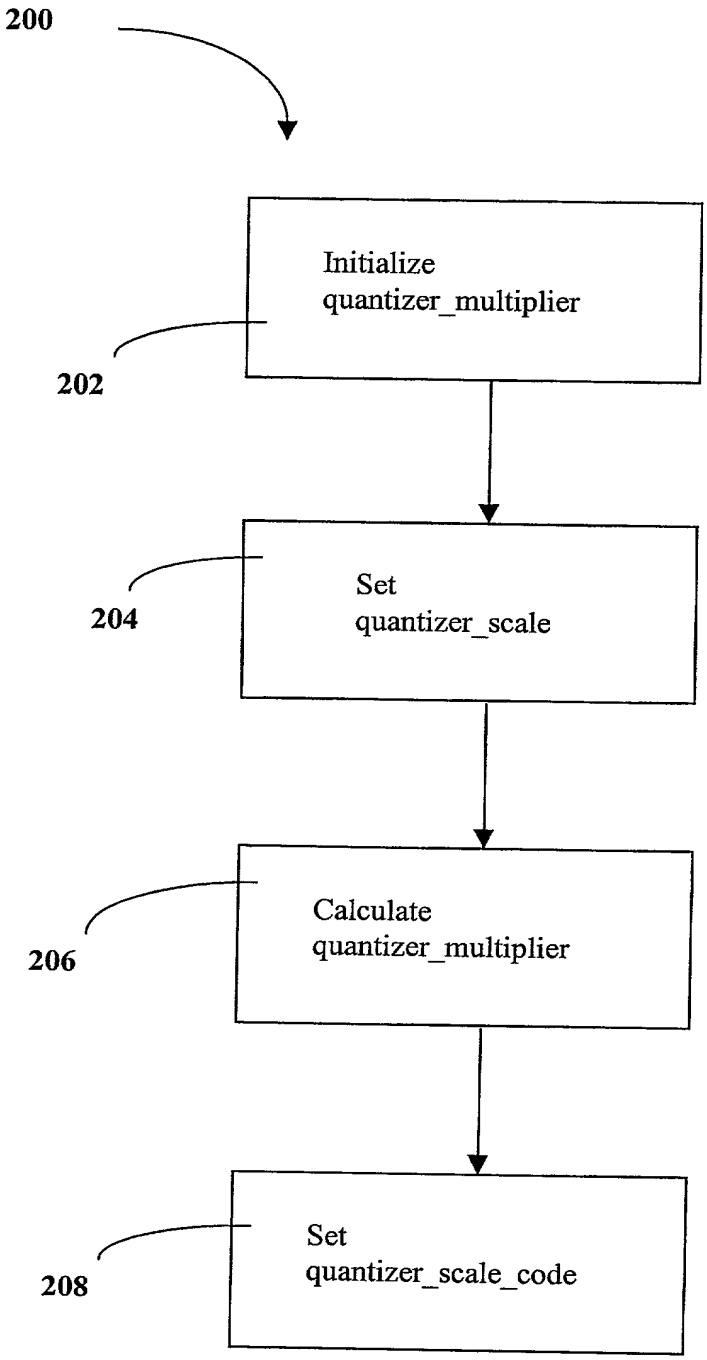

180
182
Initialize cdf[ ]
to zero
184
for each
macroblock in
the frame
186
calculate cdf

FIGURE 8


200
Initialize
quantizer_multiplier
202
Set
quantizer_scale
204
Calculate
quantizer_multiplier
206
Set
quantizer_scale_code
208